AFOLUX All-in-One Touch Panel PC

AFOLUX Vertical Application Panel PCs

3 Series

- KIOSK Solutions

4 Series

- In-wall Solutions

AFOLUX Panel PCs

- 5.6” - 19” Multi-functional Panel PCs

5 Series

- Fan-less dual core PPCs

6 Series

- 26"/42" Large Size Solutions

ACT Series

- RFID Access Control Terminals

About IEI Technology Corporation

Founded in 2006, IEI Technology Corporation is a worldwide leading IPC provider. Providing hundreds of industrial computer boards, systems and peripherals in thousands of customer applications, and supports OEM/ODM services thereby reducing customers' design time and accelerating product development to help customers advance beyond their market competition.

Main Products

IEI has an innovative R&D team, effective management system, quality assurance and over 400 products passing through more than 100 distributors providing customers with the fastest time-to-market services all over the world.

Global Service

As a leading IPC provide, IEI is offers prompt, localized services to our worldwide customers. To provide this kind of service, IEI uses a global network of over 100 distributors in Europe, Asia and North America to bring the fastest response time when servicing customers' needs. From new sales inquiries to ongoing technical support, this localization strategy, backed by IEI's strong technical and logistical support, gives customers the fastest possible response time. Having forged strong relationships with our distributors, their support expertise and technical knowledge of IEI Products are readily accessible to IEI customers worldwide. IEI has set up warehouses in Shanghai and the USA to offer comprehensive system integration hardware, software, customer-driven service and global logistics support.

United States

IEI Technology USA Corp.
168 University Parkway, Pomona,
CA 91768, USA
http://www.usa.ieiworld.com

Headquarters

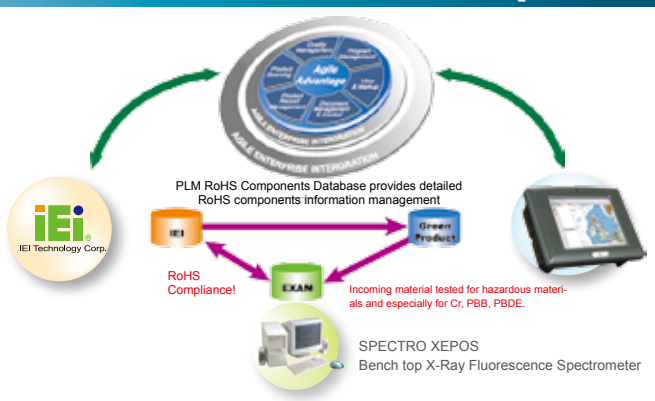
IEI Technology Corp.
No. 29, Jhongsing Rd. Sijhih City,
Taipei County, 221, Taiwan
http://www.ieiworld.com

China

IEI Technology SH Corp.
3F No. 1728 Yi-Shan Road, Min-Hang,
ShangHai, China
http://www.ieiworld.com.cn

RoHS Compliance

IEI is committed to complying with applicable laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) in electrical and electronic products. IEI's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. With IEI's new lead free production, all customers can start working on long term projects without worrying about RoHS regulations.


PLM RoHS Components Database provides detailed RoHS components information management
RoHS Compliance!
Incoming material tested for hazardous materials and especially for Cr, PBB, PBDE.
SPECTRO XEPOS
Bench top X-Ray Fluorescence Spectrometer

Design for Reliability

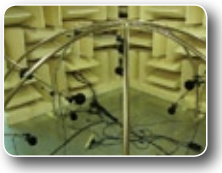
Your IEI embedded industrial appliances have all been rigorously tested in the quality assurance and compliance laboratory at IEI headquarters. To provide you with peace of mind about the quality, durability and compliance of your IEI products, IEI has invested over two million dollars into developing rigorous quality assurance and compliance testing procedures and facilities. Ten IEI quality assurance and compliance tests ensure you receive a durable product that can withstand the harsh operational environments in which embedded industrial appliances are typically used.

Direct customer benefits of our comprehensive quality assurance and compliance testing procedures include:

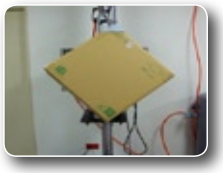
1. In-house Reliability Facilities **2. Product Compliance Testing** **3. LCD Panel Assurance**

In-house Reliability Facilities

Comprehensive quality assurance tests are performed on all IEI products throughout the product development cycle. Quality assurance tests are initiated in the research and development phase of a product and are continued all the way through to the manufacturing phase. Quality assurance testing throughout the product development cycle ensure all IEI products are able to provide stable performance in the industrial environments they are used.


Acoustic Noise Testing

Vibration and shock Testing


Drop Testing

Line Voltage / Frequency and Power Consumption Test

Temperature/Humidity Testing

Thermal Testing

Product Compliance Testing

IEI has more than 400 products used in a wide variety of applications and environments worldwide. In order to develop time-to-market products that comply with safety, EMC certification and environmental directives across the globe, IEI has three certification-compliant labs including an EMI/RF chamber, EMI chamber and semi-anechoic room. These labs are essential to helping ensure the safety of our products as well as reducing costs and improving the quality of our products and services.

EMC

IEI EMC anechoic test chambers are used to perform radiated emissions and radiated immunity testing of electrical/electronic equipment to various International specifications such as EN 50147 part 2 / ANSI C63.4 / EN55022 / EN61000-4-3 and various CISPR documents.

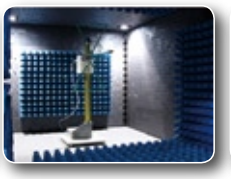
Spectrum Analyzer

LISN

ISN

EMI

EMI Chamber


EMI/RF Chamber

Harmonic Emission

ESD Testing (Electrostatic Discharge)

Conducted Disturbance

Power Frequency Magnetic Fields

Safety

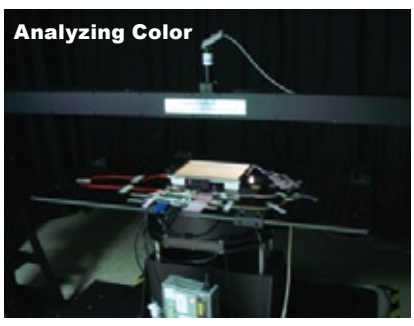
- UL60950-1/EN60950-1/IEC60950-1
- UL508
- UL60601-1/EN60601-1-1/IEC60601-1-1

LCD Quality Assurance

Quantify Display Quality – Measure uniformity, contrast ratio, viewing angle, shadowing, chromaticity, color gamut, response time, flicker, gamma, specular and diffuse reflection, power consumption to ensure IEI LCD product quality.

- Able to comply with CIE, JIS, sRGB,TCO'06, VESA measurement specifications
- Qualify IEI all the LCD products

- Color temperature and white balance adjustment
- 3D Gamma modification deliver the correct displaying
- Color Tracking modification



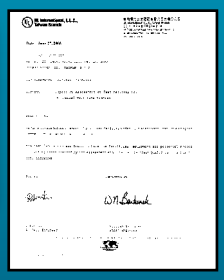
FPD Optical Performance Measuring System

FPD Auto Color Calibration System

Certified Waterproof Laboratory

IEI ruggedized LCD products are following the standard testing procedures (UL 50) and designed for high reliability. We mainly provide IP64,IP 65 and latest IP67 various mechanical dust and water resistant design ideal for outdoor and harsh environment applications.

IEI's LCD products are designed by front sealing and test in the certified house chamber under UL's witnessed Test Data Program (WTDP).



UL 50 Certificate

Chamber strickly approved by Underwriters Laboratories Inc.

IEI in house water resistance chamber is approved by UL organization commonly recognized in North America.

IP 64

IP 65

IP 66 / UL 50

NEW!

IP 67

The IP Code defined in international standard IEC 60529 classifies the degrees of protection provided against the intrusion of solid objects, dust, accidental contact, and water in electrical enclosures. It consists of the letters IP followed by two digits and an optional letter. The digits indicate conformity with the conditions summarized in the tables below.

First digit

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

Level		Object size protected against	Effective against
0		-	No protection against contact and ingress of objects
1	Ø50mm	>50 mm	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	Ø12.5mm	>12.5 mm	Fingers or similar objects
3	2.5mm	>2.5 mm	Tools, thick wires, etc.
4	1mm	>1 mm	Most wires, screws, etc.
5		dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact
6		dust tight	No ingress of dust; complete protection against contact

Second digit

Protection of the equipment inside the enclosure against harmful ingress of water.

Level		Protected against	Details
0	-	not protected	—
1		dripping water	Dripping water (vertically falling drops) shall have no harmful effect.
2		dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3		spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4		splashing water	Water splashing against the enclosure from any direction shall have no harmful effect.
5		water jets	Water projected by a nozzle against enclosure from any direction shall have no harmful effects.
6		powerful water jets	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects
7		immersion up to 1 m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).
8		immersion beyond 1 m	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer.

Light Industrial Panel PCs

AFOLUX ~Affordable Luxury for You~

5.6"~42" Multi-functional Panel PCs

AFOLUX is a remarkable all-in-one panel PC system providing superior performance, streamlined design, and industrial grade durability. Furthermore, the flexible installation alternatives make AFOLUX easy to be used just about anywhere.

AFOLUX is designed to provide cost-effective an versatile solutions to meet the vast demand emerging from semi-industrial computing markets. From clinical to factory environments, restaurants to schools, and entertainment to surveillance devices, AFOLUX is your ultimate choice to fulfill a wide spectrum of applications.

A. AFOLUX Panel PCs

5.6"/5.7" AFOLUX PPCs

7" Wide AFOLUX PPCs

10.2~12.1" AFOLUX PPCs

15”~19” AFOLUX PPCs

B. AFOLUX Vertical Application Panel PCs

AFOLUX-3 Series

KIOSK Solutions

AFOLUX-4 Series

In-Wall PPCs

AFOLUX-5 Series

Fan-less Dual Core PPCs

AFOLUX-6 Series

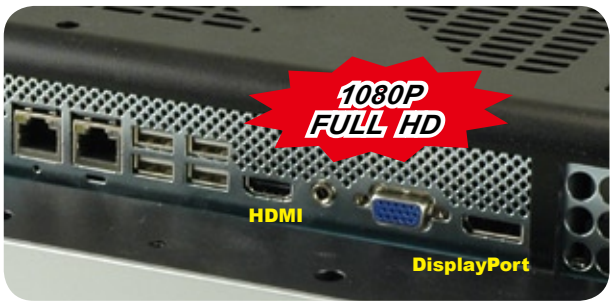
26”/42” Large Size PPCs

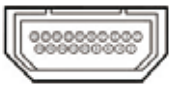
ACT Series

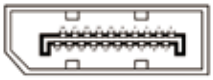
RFID Access Control Terminals

AFOLUX PPCs New Features for your Applications~

1. HDMI/Display Port delivers the High Image Quality on the Second Display



HDMI 

DisplayPort 

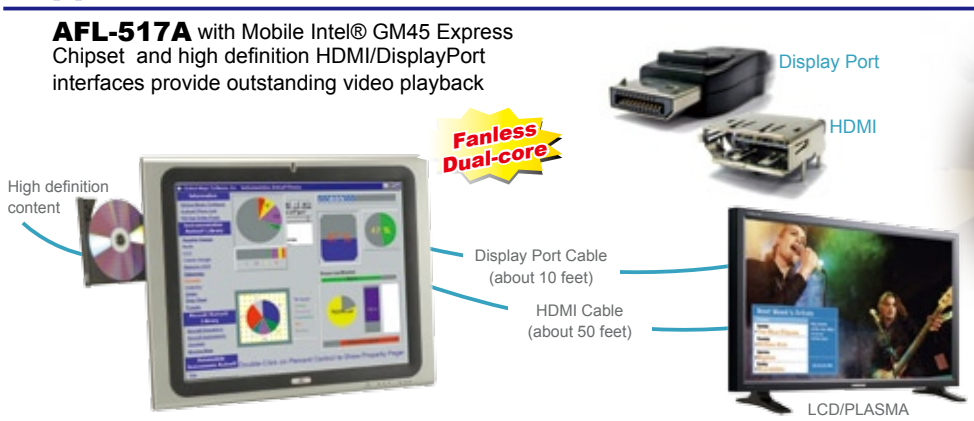
DisplayPort is a digital display interface standard put forth by the Video Electronics Standards Association (VESA). It defines a new license-free, royalty-free, digital audio/video interconnect, intended to be used primarily between a computer and its display monitor, or a computer and a home-theater system.

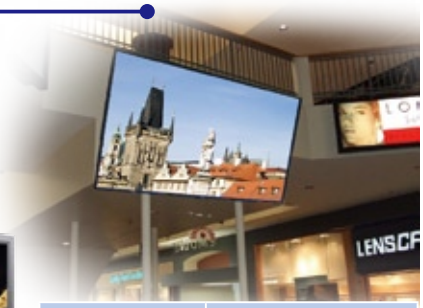
Existing Digital Interfaces

	DisplayPort	HDMI	DVI	LVDS
No. of data & clock pairs	1 to 4 data pairs, no separate clock pairs	3 (A type) or 6 (B type) data 1 clock pair	3 or 6 data (two versions of same connector) 1 clock pair	8 pairs - dual channel 2 clock pair – dual channel
Bit rate, per pair	1.6 or 2.7 Gbit/sec (fixed clock rate) Future extensible	Max. 1.65 Gbit/sec (10x pixel clock)	Max. 1.65 Gbit/sec. (10x pixel clock, fixed at 165Mhz)	945Mbit/sec (135Mhz lock)
Total raw capacity	1.6 to 10.8 Gbit/sec	4.95 (max. on A) to 9.9 (B) Gbit/sec.	4.95 (single link) to 9.9 (dual) Gbit/sec.	7.56Gbit/sec
Audio support	Yes	Yes	No	No
Content Protection	DPCP/HDCP optional	HDCP	HDCP optional	No
Controlling authority	VESA	HDMI Licensing	DDWG	ANSI

Application - Second Independent Display on LCD/PLASMA Advertising

AFL-517A with Mobile Intel® GM45 Express Chipset and high definition HDMI/DisplayPort interfaces provide outstanding video playback





Solution Models	High Definition Interfaces
AFL-W15A-GM45	HDMI
AFL-W19A(B)-GM45	HDMI
AFL-517A-GM45	HDMI/DisplayPort

2. Slim Type CD/DVD Combo Drive

AFL PPCs integrated with optical drive gives this multimedia panel PC even more functionality.

Solution Models	Optical Drive Spec.		
AFL-17D-xxxx **AFL-W19B-xxxx** **AFL-317Ax-945** **AFL-315Ax-945** **AFL-517A -GM45**	**Drive Type**	Internal Slim CD-RW/DVD Combo Drive	
	Data Transfer Rate	Write: CD-R: 24X CD-RW: 24X	Read: DVD-ROM: 8X CD-ROM: 24X
	Interface	SATA	
	Buffer Memory	2MB	

DVD writer drive

Blue-ray CD-ROM

Blu-ray Disc™ HD DVD

3. Waterproof CMOS Camera and Digital Microphone

(A) 300K pixel Camera with Low-light Function

Video Conferencing

Work Best in Low Light Condition!

Features

- Auto white balance
- Auto exposure
- Auto compensation
- Focus range of 25 cm to Infinity
- Flip Control Option

Specifications

- VGA resolution image sensor
- Video resolution: 640x480, 352x288, 320x240, 176x144, 160x120.
- Frame rate: 640x480@ 30fps max.
- Storage Format of Image: AVI
- Storage Format of Photograph: BMP, JPEG

Solution Models	AFL-08B-N270	AFL-W10A-N270	AFL-W15A-xxxx
	AFL-W19A(B)-xxxx	ACT-08A-xxxx	AFL-317Ax-945
	AFL-4xxA-N270	AFL-17D-xxxx	
Camera Spec.	300K pixel VGA camera with low light function		

(B) Two Mega pixel Camera with Auto-focus Function

VoIP

Auto-Focus without manual adjustments

Features

- Auto white balance
- Auto exposure
- Auto gain control
- Auto Focus @ 10cm ~ infinity..
- GA compliant

Specifications

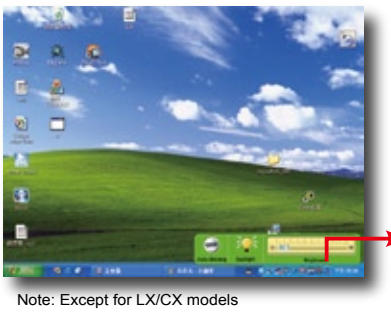
- XGA resolution image sensor
- Video resolution: 1600x1200, 1280x1024, 1024x768, 800x600, 640x480, 352x288, 320x240, 176x144, 160x120.
- Frame rate: 1600x1200@ 15 fps max, 640x480@ 30fps max.
- Max. image transfer rate: 2M @ MJPG 15fps; 1.3M @ MJPG 15fps; VGA @ MJPG 30fps

Solution Models	AFL-315Ax-945
Camera Spec.	2 Mega pixel XGA camera with Auto-focus function

Note: Optional 1.3MP Camera with Digital Microphone Module

SXGA resolution image sensor
Video resolution: 1280 x 1024, 800x 600, 640 x 480, 352x288, 320x240, 176x144, 160x120.

4. Software System OSD Control



Note: Except for LX/CX models

IEI patented system software settings utility allows users to adjust system settings from software under Windows environment instead of adjustment from the membrane keypad below the front panel.

5. Ambient Light Sensor

Benefits:

- Avoid eye strained and tried, to provide comfortable viewing
- Power consumption saving
- Extend lamp lifetime

Ambient Light Sensor

Solution Models
AFL-W15A-xxxx
AFL-W19A(B)-xxxx
AFL-26A/642A
AFOLUX In-Wall Panel PCs

6. Modularized 1D/2D Barcode Scanner and Card Reader Connections

(A) 1D/2D Barcode Scanner Panel PCs

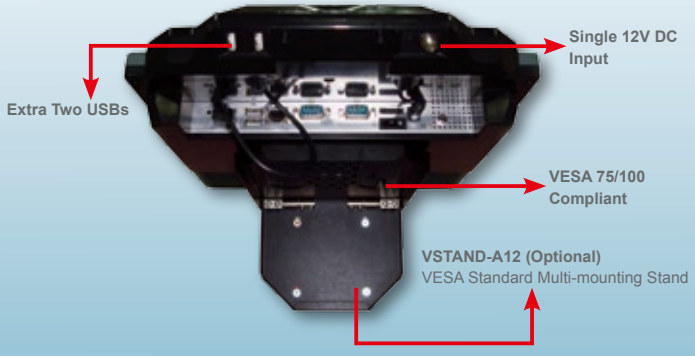
AFL2D-12x

12.1" 1D/2D Barcode Scanner Panel PCs

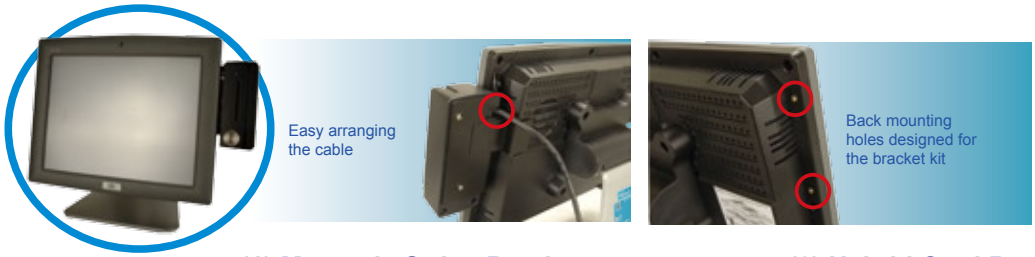
Efficient Scanning Performance

- 50°/37.5° (H/V) wide scanning area reads twice the area of typical scanner
- Area-scanning features non-direction reading drive scanning performance
- 25mm-310mm scanning distance

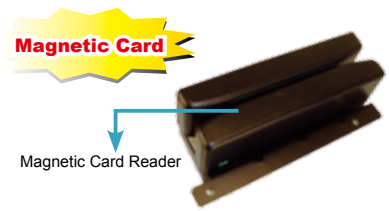
Quick Install



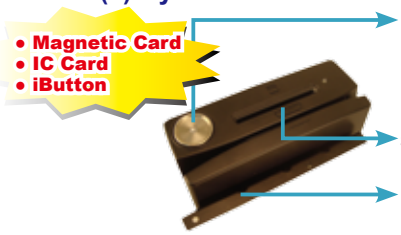
(B) Optional Magnetic Stripe Card/Smart Card/iButton Reader



(1) Magnetic Stripe Reader



(2) Hybrid Card Reader



iButton
The iButton can be used to store cash for small transactions, or as an electronic asset tag to store information needed to keep track of valuable capital equipment.

Smart Card Reader

Magnetic Card Reader

P/N	AFLP-12BMSR-U / AFLP-17AMSR-U	AFLP-12BMSI-U / AFLP-17AMSI-U
General	90 mm Magnetic Stripe Reader Programming: By Software Download Program Card Standard: ANSI , ISO , ABA Track Read: ISO 1,2,3 (IATA,ABA,THRIFT/MINTS), JISII100-1000mm/sec	(1) Magnetic Card: ISO 7811, AAMVA, DMV, JIS II (2) Smart Card: ISO 7816, EMV (3) Dallas iButton
Electrical	Voltage:DC+5V, +/-5% Reading Inicator:Beeper	Voltage: DC+5V,+/-5% Reading Inicator:Beeper
Environment	Operating Temperature: 0°C to 40°C Relative Humidity: 20% to 85 % (Non-condensing)	Operating Temperature: -10°C to 55°C Relative Humidity: 10% to 90 % (Non-condensing)
Physical	Cable: Straight 2.5ft Weight: Approx.61g	Cable: Straight 2.5ft Weight: Approx.60g
Interface	USB	USB

7. Hardware System OSD Control

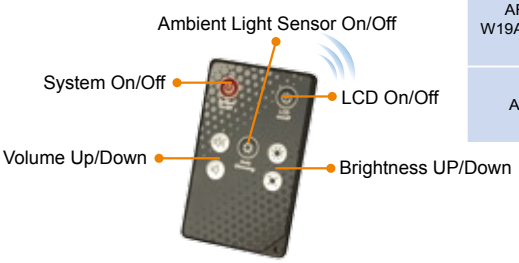
(A) Membrane Keypad below the Panel

To help identify the ports, there are labels marked on the keypad which is below the panel.

Solution Models	Hardware OSD Control	
AFL-xxC-9652	5-key Keypad	LCD On/Off, Volume, Brightness
AFL-17D-xxxx		
AFL-W19B-xxxx		
AFL-W15A-xxxx	7-key Keypad	LCD On/Off, OSD Lock, Volume, Brightness, Ambient Light Sensor
AFL-W19A-xxxx		
AFL-26A/642A	7-key Keypad	LCD On/Off, Volume, Brightness, Ambient Light Sensor

(B) IR Remote Control

Difficult to reach Location

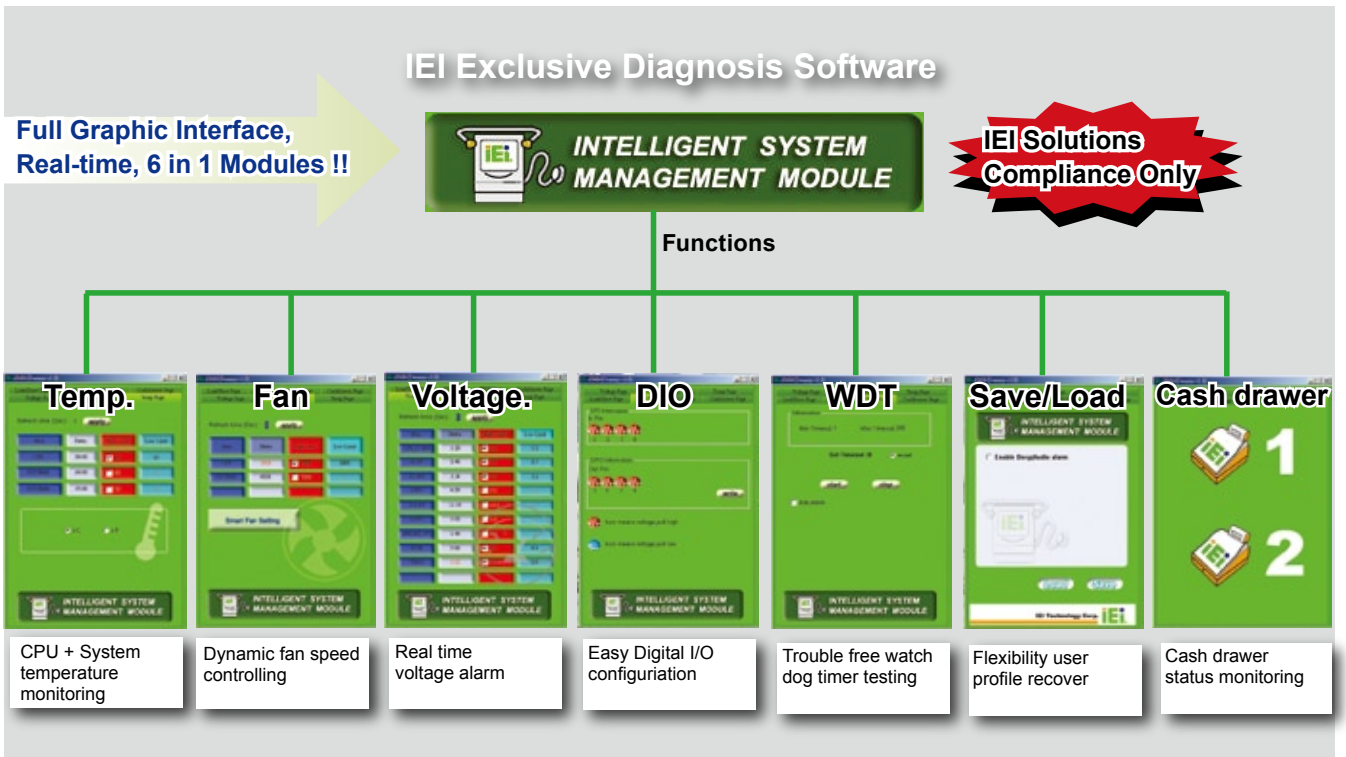


Solution Models	IR Control
AFL-W15AAFL-W19AAFOLUX In-Wall Solutions	Ambient Light Sensor, System On/Off, Volume Up/Down, LCD On/Off, Brightness Up/Down
AFL-26A/642A	Volume Up/Down, LCD On/Off, OSD Lock, Brightness Up/Down, Auto Adjustment

8. IEI Intelligent System Management Module (ISMM)

IEI iSMM is a system health supervision API which utilizes sensor chips on IEI motherboards to track system and CPU temperatures, voltages, cooling fan speed., WDT and Digital I/O set up status . By quickly capturing and reporting system health data, users can prevent disasters such as system instability or damage.

iSMM



9. Selectable AT/ATX Power Mode

AT Power Mode

With the AT mode selected, the power is controlled by a central power unit rather than a power switch. The AFOLUX PPCs turns on automatically when the power is connected.

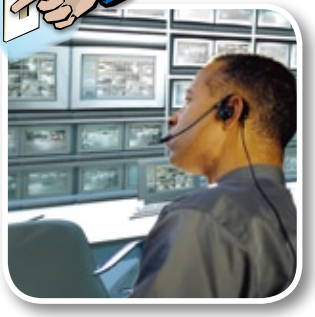
Advantages

- Easy to turn on/off with wall/panel mounting
- Automatic start when power connected

Applications

- ATM
- Self-service kiosk
- Plant environment monitoring system
- Factory automation platform
- Manufacturing shop flow

ATX Power Mode



With the ATX mode selected, the AFL-915 series panel PC goes in a standby mode when it is turned off. The panel PC can be easily turned on via network or a power switch in standby mode. Remote power control is perfect for advertising applications since the broadcasting time for each panel PC can be set individually and controlled remotely.

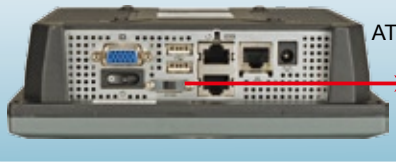
Applications

- Security surveillance
- Point-of-Sale (POS)
- Advertising terminal

Advantages

- Power management
- Remote control via network advantage

Convenient Power Mode Setting



AT/ATX switch on the rear panel

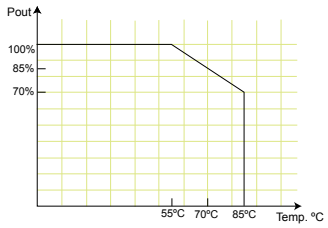
At the bottom right on the aluminum chassis

10. Optional DC/DC Converter Module

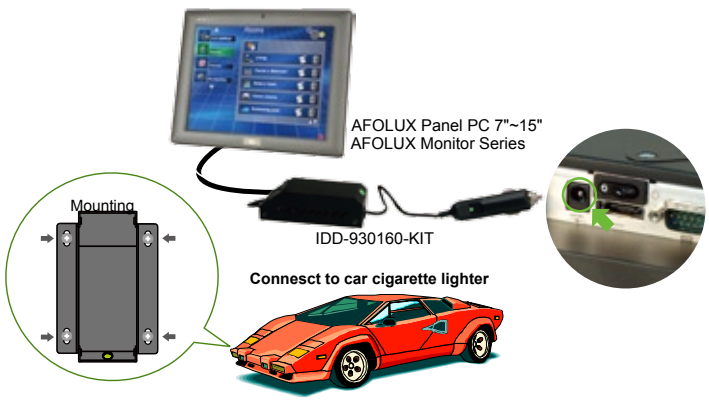
IDD-930160-KIT
60 W DC/DC Converter Module

Specifications

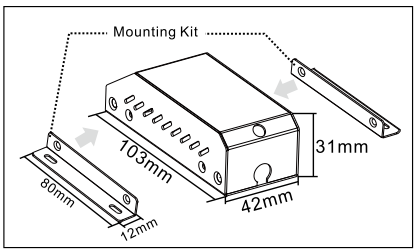
- Input voltage: 9-30 VDC
- Input current:Max. 8.2 A at 9 VDC
- Output: 12 V@5 A
- Max. total output: 60W
- Performance characteristics:
  Noise and ripple:<120 mV
  Line regulation: <2.5%
  Load regulation: <2.5%
- Transient toggle rate: 250 Hz (50% duty ratio)
- Transient current step:
  From 0% to 50% and 50% to 100% of max current
- Efficiency: typ. 95% (Vin=12 V, 80% of full load)
- Dimensions: 42 mm x 103 mm x 31 mm
- Mounting kit: 12 mm x 80 mm
- Cable length: 180 cm
- Operating temperature: -10°C~55°C
- Load down protection



Typical Applications



Dimensions (Millimeters)



Packing Information

1 x IDD-930160-KIT-R10
1 x Mounting kit
1 x Screw kit
1 x Anti-slip strip
1 x Utility CD

Ordering Information

Part No.	Description
IDD-930160-KIT-R10	60 W DC/DC 9-30 VDC input vehicle power adapter

Complete Embedded OS Support

IEI provides optional pre-installed Windows ® XP Embedded, Windows® CE and LINUX turnkey solutions. These turnkey solutions have one Compact Flash card with either Windows® XP Embedded/Windows® CE/LINUX pre-installed, one Windows® XP Embedded or Windows® CE license, and one CD that contains all related SDK (Software Development Kit) and user manuals.

Windows® XP Embedded

Include:
- Windows® XPE OS image with license
- Thin Client turnkey solutions.

Windows® CE5.0 / CE6.0

Windows® CE5.0/CE6.0
- Standard Windows® CE5.0/CE 6.0 professional version license
- Attached Software Development Kit (SDK) to program Windows® CE application
- Board Support Package (BSP) for customers to customize their own OS image

Windows® Platform Builder

Customization WinCE

128 MB SDK/BSP

Include:
- Windows® CE 5.0/ 6.0 OS image with license
- Thin Client turnkey solutions
- SDK/BSP

Linux Kernel 2.6.26

- Official Debian GNU/Linux 4.0 Rev 5 and OS image including.
- Related Linux drivers for onboard peripheral I/O, network and audio.
- Including GUI, Sample Code, and Tool chain make users program application readily.

Embedded Linux Kernel configuration

2 GB Recover CD

Include:
- LINUX OS image
- Recover utility

Link

Internet Browser

Web browser based on Mozilla Iceweasel featuring single click file viewing, external editor support, thumbnail previews, thumbnail caching, and adjustable zoom.

Work

Text Editor

Official text editor of the GNOME desktop environment gedit is a text editor which supports most standard editor features and editing multiple text files in one window. Highlighting of auto indentation and printing and print preview support, support for spell checking, comparing files,and adjusting indentation levels.

Media Player

Movie player for Unix-like systems MPlayer plays most MPEG, VOB, AVI, Ogg/OGM, VIVO.....

Image Editor/Image Viewer

GIMP lets you draw, paint, edit images, and much more!

Build

Terminal

This package provides four commands

Package Manager

Synaptic enables you to install, upgrade and remove software packages in a user friendly way. Besides these basic functions the following features are provided:
* Search and filter the list of available packages
* Perform smart system upgrades
* Fix broken package dependencies
* Edit the list of used repositories (sources.list)
* Download the latest changelog of a package
* Configure packages through the debconf system
* Browse all available documentation related to a package (dwww is required)

File

File Manager

Powerful file recognition system allows you to configure how files of different types are shown (with colors and icons), and what happens when you doubleclick them (spawn image viewers, music players, etc).

Desktop Control Center

IceWm is a Window Manager for X Window System. It is fast and memory-efficient, and it provides many different looks including Windows'95, OS/2 Warp 3,4, Motif. It tries to take the best features of the above systems. Additional features include multiple workspaces, opaque move/resize, task bar, window list, mailbox status, digital clock.

A. AFOLUX Panel PCs

15"~19" AFOLUX Panel PCs

5.6"/5.7" Mini- fanless AFOLUX Panel PCs

7" Wide AFOLUX Panel PCs

10.2~12.1" AFOLUX Panel PCs

Distinctive Features:

» 5.6"~19" All-in-One Panel PC
» Integrated with robust 4/5-wire resistive touch panel
» Highly integrated 802.11 wireless module
» Built-in two speakers and line-out extend voice functions for Kiosks, POS and advertising applications
» Built-in bluetooth technology rids systems of cables and allows wireless connection to peripheral devices like head phones, printers, barcode readers or game controllers
» VESA-mountable for flexibility in mounting and deployment
» Comprehensive set of USB and full legacy I/O ports for peripherals and accessories
» Enabling easier access to the internet through a HSUPA network (Optional)
» Turn-key solution with embedded Window CE/Windows XP Embedded/Linux OS (Optional)

2009 New Models

Extreme Low Power ATOM Series

8" PPCs built in Camera Module

10.2"/15" Wide Screen

19" Wide Screen

MARKETS

- E-LEARNING
- CONFERENCE ROOM
- DIGITAL SIGNAGE
- TRANSPORTATION
- POINT OF SERVICE
- POS SYTEM
- RETIALING
- HOSPITALITY
- FACTORY AUTOMATION
- MEDICAL
- ENTERTIAINMENT
- FITNESS EUIPEMENT
- MEDICAL
- INTERACITE INTERVIEW SYSTEM
- CAR PC
- WORK FLOW
- MEDIA CONTROL CENTER
- SECURITY CENTER
- BALLROOMS
- HOTELS
- SCHOOLS
- RESIDENTIAL

Platform \ LCD		Small Size		Medium Size					General Size				
		5.7"	Wide 7"	8"	8.4"	10.4"	Wide 10.2"	12.1"	15"	Wide 15"	17"	19"	Wide 19"
		640x 480	800x 480	800 x 600		800x 600	1024 x 600	1024 x 768	1024 x 768	1366 x 768	1280 x 1024	1280 x 1024	1440 x 900
Fanless Embedded Computing	AMD LX800	AFL-057A-LX	AFL-07A-LX		AFL-08AH-LX	AFL-10A-LX		AFL-12A-LX					
	Intel® 945GSE(ATOM)		AFL-07A-N270	AFL-08B-N270	AFL-08AH-N270	AFL-10A-N270	AFL-W10A-N270	AFL-12A-N270	AFL-15A-N270	AFL-W15A-N270	AFL-17D-N270		AFL-W19A-N270
Single Core Computing	Intel® 910GMLE/915GME					Fanless AFL-10A-9103		Fanless AFL-12B-9103	Fanless AFL-15A-915		Fanless AFL-17A-915	Fanless AFL-19A-915	
	Intel® 915GME								AFI-15B-915		AFL-17B-915	AFL-19B-915	
Dual Core Computing	Intel® GME965								AFL-15C-9652		AFL-17C-9652	AFL-19C-9652	
	AMD 690E								AFL-15B-AM2		AFL-17B-AM2	AFL-19B-AM2	
	Intel® GM45									AFL-W15A-GM45	AFL-17D-GM45		AFL-W19B-GM45

B. AFOLUX Vertical Application Panel PCs

AFOLUX all-in-one PPC series based on its integrated multi-functions design grows to include new vertical market applications, permitting extremely flexible integration into a wide variety of applications, such as: high performance KIOSK solution, entry level all-in-one POS Panel PC RFID solution and so on.

AFOLUX 3 Series
KIOSK Solutions

- 15” and 17” TFT LCD with resistive touch screen
- Deep black/white glossy surface
- Back IO design allows installation in minutes

AFOLUX 4 Series
In-Wall Panel PCs

NEW

- In-wall mounting allows easy installation in minutes
- Changeable face plate and face plate skin sticker available to match diverse decoration styles

AFOLUX 5 Series
Fanless Dual Core Panel PCs

NEW

- 17” fanless high performance system integrated with Intel® GM45 chipset and 45nm mobile Core
- Optical drive design

AFOLUX RFID Solutions

- Integrated RFID reader in front of the panel for MIFARE 13.56 MHz or EM 125 KHz RFID tag
- Built-in 300K pixel camera and digital microphone

AFOLUX 6 Series
26"/42" Large Size Panel PCs

NEW

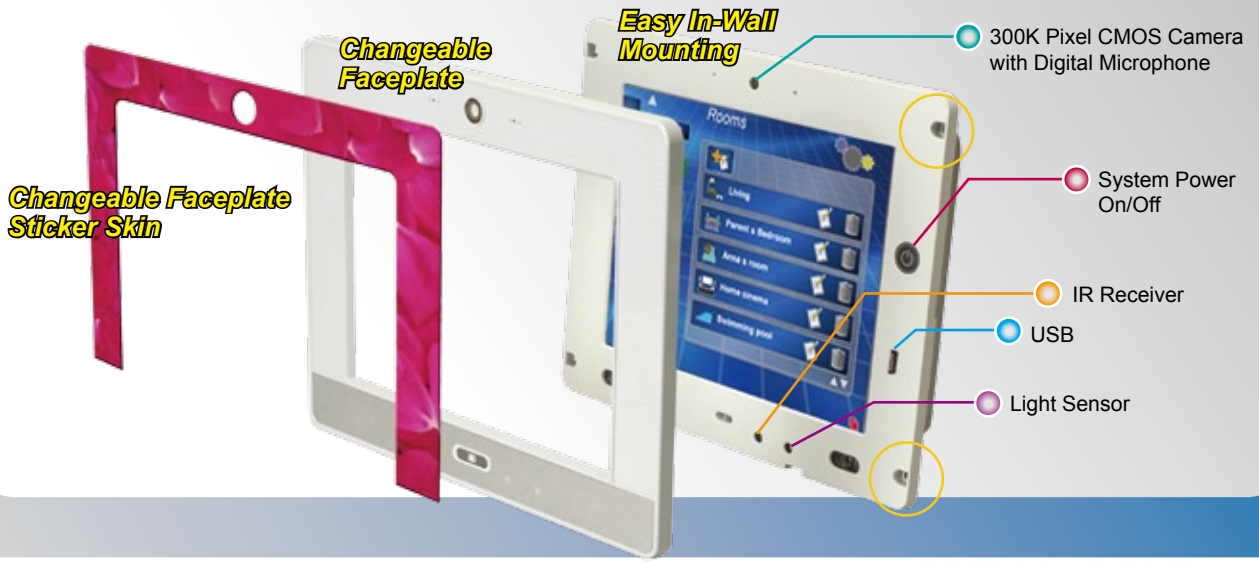
- 26” 1920 x 1200 FULL HD large screen with anti-reflection tempered glass protection/SAW touch panel
- 42” 1366 x 768 HD large screen with anti-reflection tempered glass protection/SAW touch panel

Product Line	Platform	8” 800 x 600	8.4” 800 x 600	Wide 10.2” 1024 x 600	12.1” 1024 x 768	15” 1024 x 768	17” 1280 x 1024	26” 1920 x 1200	42” 1920 x 1080
3-series KIOSK Solutions	Intel® 945G					AFL-315A	AFL-317A		
4-series In-wall Panel PCs	Intel® 945GSE (ATOM)	AFL-408B-N270	AFL-408A-N270	AFL-W410A-N270	AFL-412A-N270	AFL-415A-N270 AFL-415AE-N270			
5-series Fanless Dual Core Panel PCs	Intel® GM45						AFL-517A-GM45		
6-series Large Screen Panel PCs	Intel® GM45							AFL-26AE-GM45	AFL-642AE-GM45
	AMD 690E							AFL-26AE-AM2	AFL-642AE-AM2
RFID Solutions	Intel® 910GMLE		ACT-08A-9103						
	Intel® 945GSE (ATOM)	ACT-08B-N270	ACT-08A-N270	ACT-412A-N270					

Note: Product model name “**E**” stands for economical model

AFOLUX-4 Series AFOLUX All-in-One In-Wall Panel PC

8"~15" In-wall Mounting Panel PC with Changeable Faceplate and Sticker Skin designed in Flexible Options to Match your Diverse Style.



Fanless | TouchScreen | 3.75G HSUPA | Speakers | Microphone | Camera | Wireless 802.11 b/g | Bluetooth | IP 64

Fanless
An on-board 1.6GHz Intel® Atom™ N270 CPU ensures low power requiements. Metal casting design housing replaces the fan as it helps the dissipate heat.

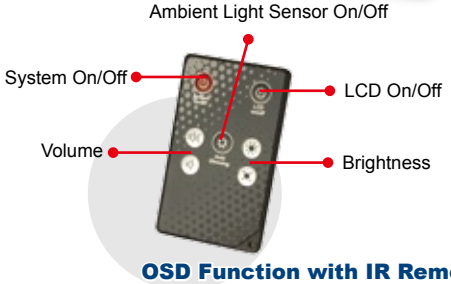
Changeable Faceplate/Sticker Skin
Multiple faceplate/skin sticker available to match diverse decoration styles

Easy In-wall in minutes
In-wall mounting just three simple steps: cut-out the panel , screw on and put on the faceplate

VESA Mounting Compliant

Features

- 8” ~ 15” TFT LCD with resistive touch screen.
- Fanless system with Intel® Atom™ process N270 1.6GHz CPU
- Changeable faceplate and sticker skin
- In-wall mechanism design allows easy to installation in minutes
- Digital I/O RJ-12 port that provides extension for peripherals such as a cash drawer device, lamp, alarms etc.
- Build-in CMOS camera with digital microphone and two 1.5W speakers for multimedia applications
- Enabling easier access to the internet through a HSUPA network (Optional)
- Buit-in bluetooth technology rids systems of cables and allows wireless connection to peripheral devices like head phones, keyboard and mouse
- VESA-mountable for flexibility in mounting and deployment
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.
- IP64 front panel compliant
- Windows XP Embedded/Windows CE/Linux (Debian 2.6.26) Support



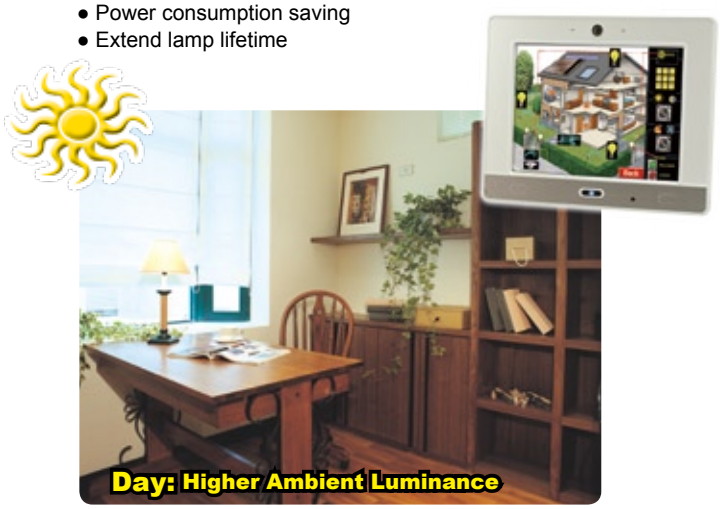
OSD Function with IR Remote Control

Ambient Light Sensor

AFL-4xxx series built in the ambient light sensor in front of the panel to automatically detect the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:

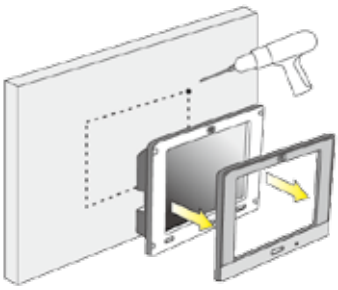
- Avoid eye strained and tried, to provide comfortable viewing
- Power consumption saving
- Extend lamp lifetime



Easy In-wall Installation in Minutes

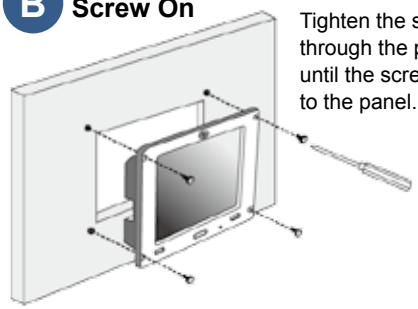
AFL-4xxx series was not only increases flexibility of versatile patterns of the faceplate, but also ease of installation.

A Cut Out the Panel



Select the position on the panel to mount the flat panel PC. Cut out a section from the panel that corresponds to the rear panel dimensions.

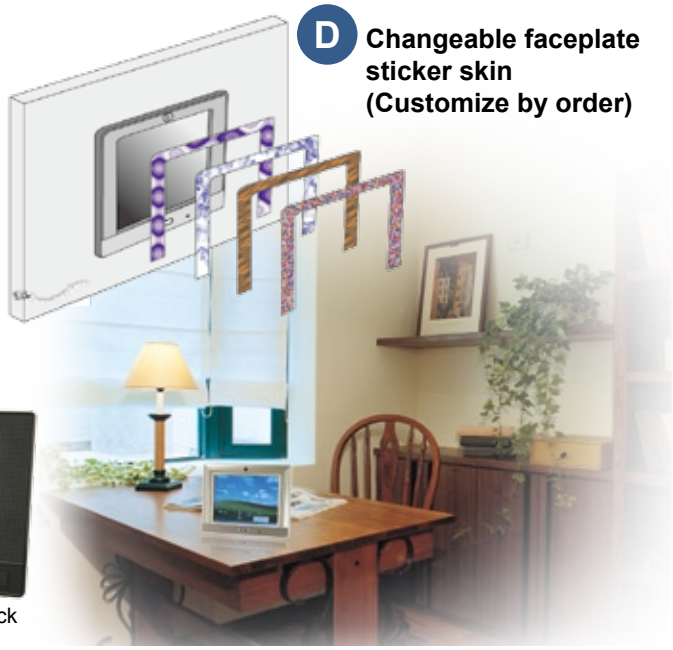
B Screw On



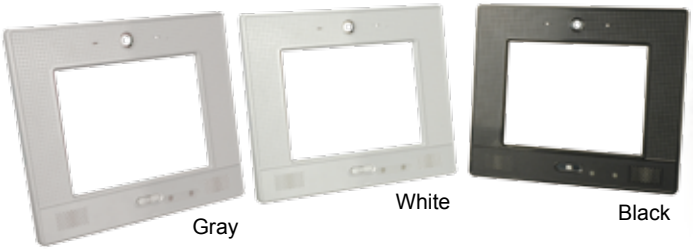
Tighten the screws that pass through the panel mounting holes until the screws are firmly secured to the panel.

C Put on the Faceplate

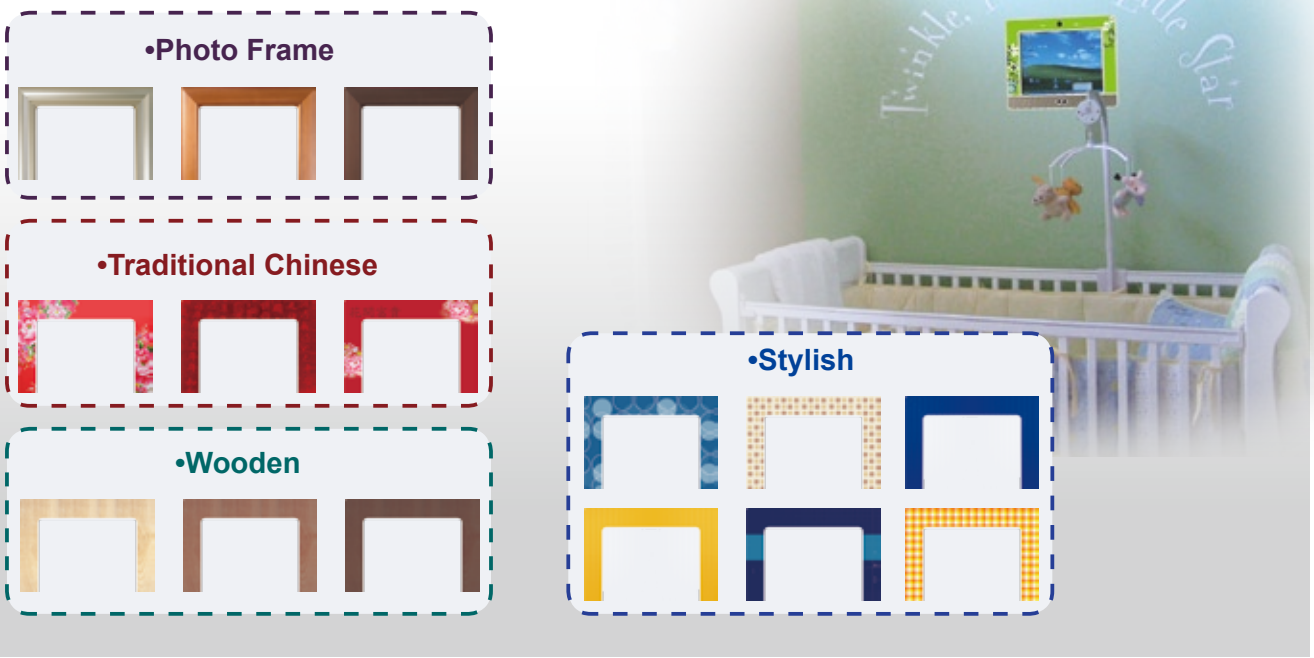
D Changeable faceplate sticker skin (Customize by order)



Changeable Faceplate in Gray/White/Black Color



Versatile Faceplate Sticker Skin Patterns Enhance your Design Style!

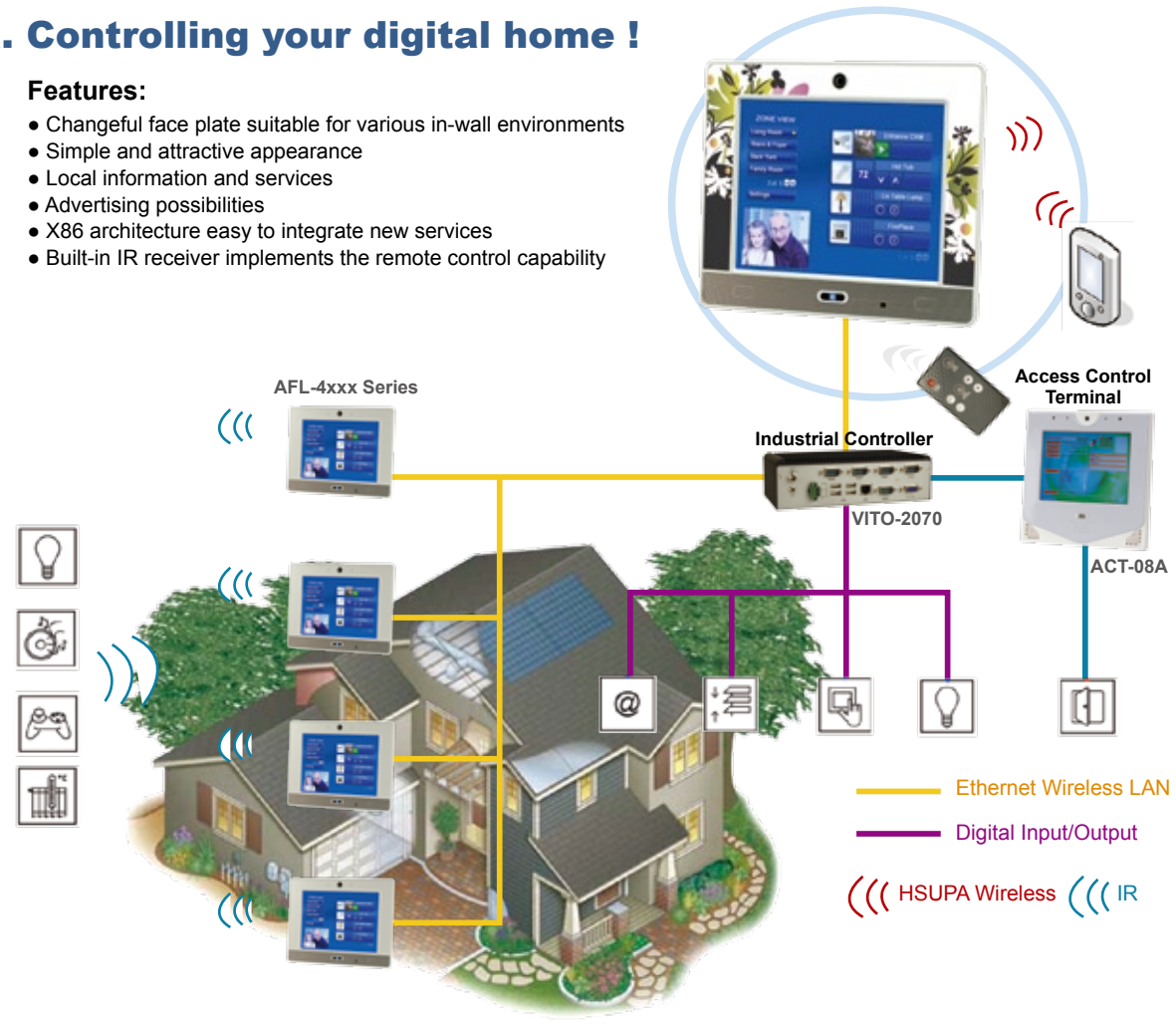


What are we going after ? Various Applications

A. Controlling your digital home !

Features:

- Changeful face plate suitable for various in-wall environments
- Simple and attractive appearance
- Local information and services
- Advertising possibilities
- X86 architecture easy to integrate new services
- Built-in IR receiver implements the remote control capability



Designing a Home Automation System

Audio Control

Telephone annoucement and music from one room can follow you down the hall and into the kitchen.

Lighting Control

Lighting set by schedule, time of day.

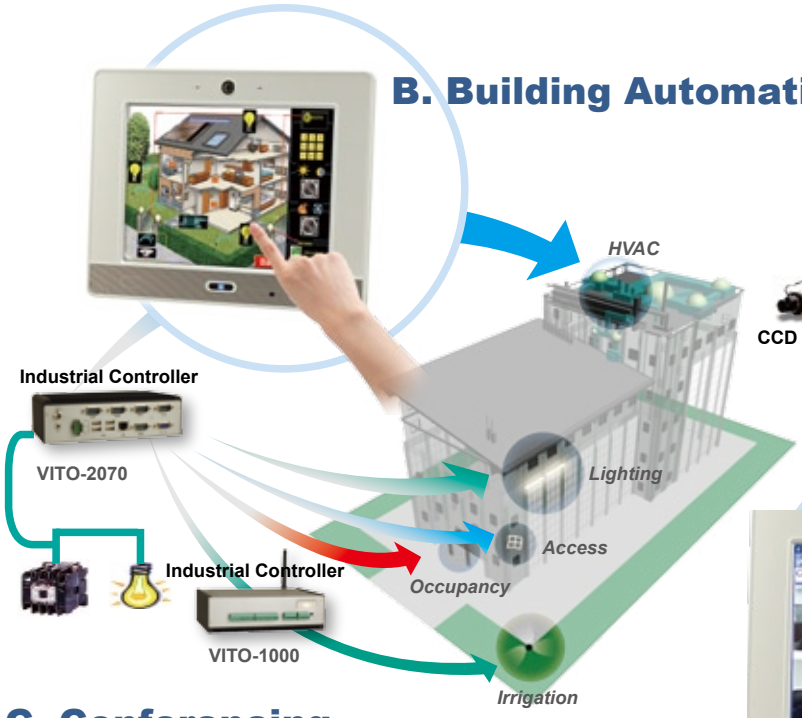
Security

- Control the lighting, in the event of alarm or fire.
- View and record surveillance video

Energy Management

- Lights turn off when leaving the home.
- Settings restore automatically when returning home, saving energy.

B. Building Automation



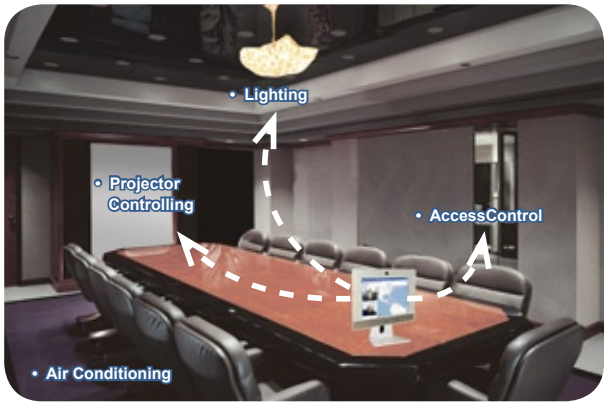
Features:

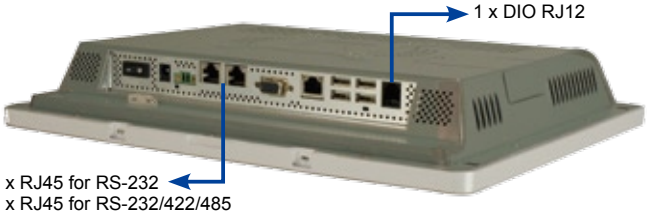
- Rich I/O interface for easy peripheral integration in any location.
- Uninterrupted network connection ensures real-time data and information transmission.

C. Conferencing

Features:

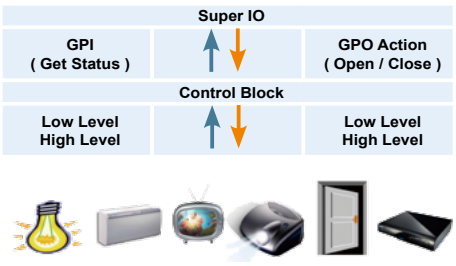
- Trouble-free video conferencing with integrated audio/video hardware and wireless connection.

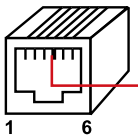




- Equipped with a digital I/O RJ-12 with to remotely control the device on and off.

RJ-12 Digital IO Control Diagram

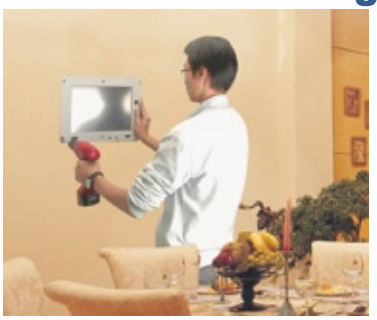




Pin	Assignment
1	Ground
2	Digital Out Programmable
3	Digital In
4	+12 V
5	NC
6	Ground

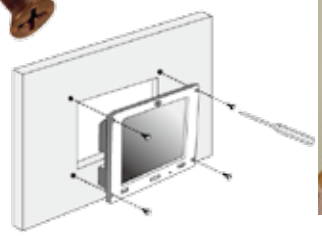
IEI Quick Mounting Technology

• In-wall Mounting



Self-drilling screws

1.Diameter:M4
2.Length: >15mm



• Wall Mount

AFLWK-12
VESA 75mm/75mm

AFLWK-19
VESA 100mm/100mm

• Desktop Stand

Easy Stand

STAND-A08
(For 8" and 8.4" AFL Series)

STAND-A12
(For 10" and 12" AFL Series)

STAND-A19
(For 15" AFL Series)

Comfortable Stand

Portrait/Landscape

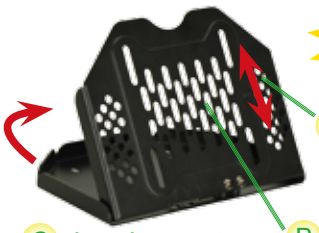
Height Adjustment(13 cm)

STAND-B19
(For 15" AFL Series)

Right/Left Pan (270°)

Forward & Back Tilt(+25°/-5°)

• V-Stand



NEW !

A. VESA 75/100 Compliant with Height Adjustable

B. Designed holes help to dissipate the system heat

C. 0° to 90° adjustable hinge design

Features:

- 0° to 90° adjustable hinge design allows comfortable viewing
- Standard VESA 75/100 Compliance
- Heat dissipation holes designed
- Compact size easy to use and mount anywhere

VSTAND-A10
(For 8"~10.4" AFL Series)

VSTAND-A12
(For 12.1" AFL Series)

The Benefits

A. One fits all solution

V-Stand is designed to be compact and tilt adjustable. Provides mobility and ergonomic comfort to fit common wall and ceiling mounting situations.

Wall Mounting

Back office POS system

Ceiling Mounting

Car PC

B. 0° to 90° adjustability

Change the angle of the stand from 0° to 90° to reach almost any point with ergonomic features for comfortable viewing.

POS system

No Hinge Limitation !

C. Space saving and easy to install

1: Tighten the screws in the rear of the AFOLUX PPC VESA mounting holes

2: Select the position to mount stand kit

3: Plug in the system to operate

Compact size provides mobility

AFL-408A-N270
8.4” SVGA Fanless In-Wall Panel PC

AFL-408B-N270
8.0” SVGA Fanless In-Wall Panel PC

AFL-W410A-N270
Wide 10.2” SVGA Fanless In-Wall Panel PC

Features

1. 8” ~ 15” TFT LCD with resistive touch screen.
2. Fanless system with Intel® Atom™ process N270 1.6GHz CPU
3. Changeable faceplate and sticker skin
4. In-wall mechanism design allows easy to installation in minutes
5. Digital I/O RJ-12 port that provides extension for peripherals such as a cash drawer device, lamp, alarms etc.
6. Build-in CMOS camera with digital microphone and two 1.5W speakers for multimedia applications (Optional)
7. Enabling easier access to the internet through a HSUPA network (Optional)
8. Buit-in bluetooth technology rids systems of cables and allows wireless connection to peripheral devices like head phones, keyboard and mouse
9. VESA-mountable for flexibility in mounting and deployment
10. Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.

Specifications

Economical Version — Economical Version

Model		AFL-408A-N270-R11	AFL-408B-N270-R12	AFL-W410A-N270-R11
Display	LCD Size	8.4"	8.0"	10.2"
	Max Resolution	800 x 600	800 x 600	1024 x 600
	Brightness (cd/m²)	400	250	400
	Contrast Ratio	400 : 1	500 : 1	400 : 1
	LCD Color	262K	262K	262K
	Pixel Pitch (mm)	0.213(H) x 0.213(V)	0,2025(H) x 0,2025(V)	0.2175(H) x 0.2175(V)
	Viewing Angle (H-V)	120° /100°	140° /130°	140° /110°
	Backlight MTBF (hrs)	50000	30000	40000
Motherboard	CPU	Intel® Atom™ process N270 1.6GHz CPU		
	Chipset	Intel® 945GSE + ICH7M		
	RAM	Supports one 200-pin 2GB (Maximum) 400MHz or 533MHz DDRII SO-DIMM		
I/O Ports		1 x RJ-45 for RS232 COM Port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Giga LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power Switch (Inside Fornt Panel & Rear cover) 1 x Reset Button 1 x RJ12 for Digital Input / Output 1 x Terminal Block for 10~28VDC Input 1 x VGA Port		
Drive Bay	HDD Drive Bay	N/A		
	SSD	CF TypeII		
	HSUPA Mobile Solution (Optional)	N/A	N/A	1 x HSUPA Mobile Module (USB Interface)
Other Features	Watchdog Timer	Software programmable supports 1~255 sec. System reset		
	Audio	AMP 1.5W + 1.5W		
	WiFi	Wireless Lan Module (PCIe Mini Card, 802.11 b/g LAN Module)		
	Bluetooth	Bluetooth Module (USB Interface V2.0)	N/A	N/A
	Webcam and Digital Microphone	Webcam & Mic Function	N/A	N/A
	Remote Control	1 x Remote Controller (LCD On/Off; System Power On/Off; Volume; Brightness)		
	LED Function	1 x Power ON/OFF LED on Front Panel		
Physical	Construction Material	ABS + PC Plastic front frame		
	Mounting	Panel, Wall, VESA 75mm x 75mm/ 100mm x 100mm		
	Front Panel Color	Black/ White/ Gray		
	Net Weight	0.8Kg	0.8Kg	1.5Kg
	Dimension (WxHxD) (mm)	263.2 x 221.2 x 54.4	263.2 x 221.2 x 54.4	313.83 x 222.13 x 52.5
Environment	Operation Temperature (°C)	0°C ~50°C	0°C ~50°C	0°C ~50°C
	Storage Temperature (°C)	-20°C ~60°C	-20°C ~60°C	-20°C ~60°C
	IP Level	IP64	IP64	IP64
	EMC	CE, FCC, CCC	CE, FCC, CCC	CE, FCC, CCC
	Safety	CB	CB	CB
Touch Screen		Resistive Type 4-Wire (Touch controller IC is on board)	Resistive Type 4-Wire (Touch controller IC is on board)	Resistive Type 5-Wire (Touch controller IC is on board)
Power Adapter		P/N: 63000-FSP0401ADF03A822-RS Power: 40W Input: 90VAC~264VAC, 50/60Hz Output: 12VDC		
Power Requirement		10 ~ 28V DC-IN	10 ~ 28V DC-IN	10 ~ 28V DC-IN
Power Consumption		25W	25W	28W

AFL-412A-N270
12.1” XGA Fanless In-Wall Panel PC

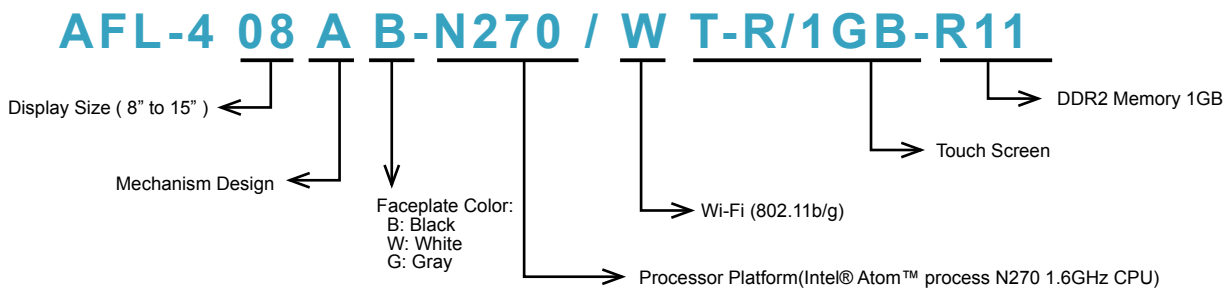
AFL-415A-N270
15” XGA Fanless In-Wall Panel PC

AFL-415AE-N270
15” XGA Economical Fanless In-Wall Panel PC

Specifications

Model		AFL-412A-N270-R11	AFL-415A-N270-R11	AFL-415AE-N270-R11
Display	LCD Size	12.1"	15"	15"
	Max Resolution	1024 x 768	1024 x 768	1024 x 768
	Brightness (cd/m²)	400	350	250
	Contrast Ratio	500 : 1	700 : 1	600 : 1
	LCD Color	262K	262K	262K
	Pixel Pitch (mm)	0.240(H) x 0.240(V)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)
	Viewing Angle (H-V)	120° /100°	140° /125°	160° /160°
	Backlight MTBF (hrs)	50000	50000	50000
Motherboard	CPU	Intel® Atom™ process N270 1.6GHz CPU		
	Chipset	Intel® 945GSE + ICH7M		
	RAM	Supports one 200-pin 2GB (Maximum) 400MHz or 533MHz DDRII SO-DIMM		
I/O Ports		1 x RJ-45 for RS232 COM Port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Giga LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power Switch (Inside Fornt Panel & Rear cover) 1 x Reset Button 1 x RJ12 for Digital Input / Output 1 x Terminal Block for 10~28VDC Input 1 x VGA Port		
Drive Bay	HDD Drive Bay	1 x 2.5" SATA HDD bay or Option HSUPA Module		
	SSD	CF TypeII		
	HSUPA Mobile Solution (Optional)	1 x HSUPA Mobile Module (USB Interface)		
Other Features	Watchdog Timer	Software programmable supports 1~255 sec. System reset		
	Audio	AMP 1.5W+1.5W	AMP 2W+2W	AMP 2W+2W
	WiFi	1 x Wireless Lan Module (PCIe Mini Card, 802.11 b/g LAN Module)		
	Bluetooth	1 x Bluetooth Module (USB Interface V2.0)		
	Webcam and Digital Microphone	1 x Webcam & Mic Function		
	Remote Control	1 x Remote Controller (LCD On/Off; System Power On/Off; Volume; Brightness)		
	LED Function	1 x Power ON/OFF LED on Front Panel		
Physical	Construction Material	ABS + PC Plastic front frame		
	Mounting	Panel, Wall, VESA 75mm x 75mm / 100mm x 100mm		
	Front Panel Color	Black/ White/ Gray		
	Net Weight	1.8Kg	2.8Kg	
	Dimension (WxHxD) (mm)	339 x 276 x 51.6	385.7 x 330.7 x 55.5	
Environment	Operation Temperature (°C)	0°C ~40°C with HDD 0°C ~50°C with CF Card or SATA interface 2.5"SSD HDD		
	Storage Temperature (°C)	-20°C ~60°C		
	IP Level	IP64		
	EMC	CE, FCC, CCC		
	Safety	CB		
Touch Screen		Resistive Type 5-Wire (Touch controller IC is on board)		
Power Adapter		P/N: 63000-FSP0481AD101C-RS Power: 48W Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP0601AD101C-746RS Power: 60W Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	
Power Requirement		10 ~ 28V DC-IN	10 ~ 28V DC-IN	
Power Consumption		32W	49W	49W

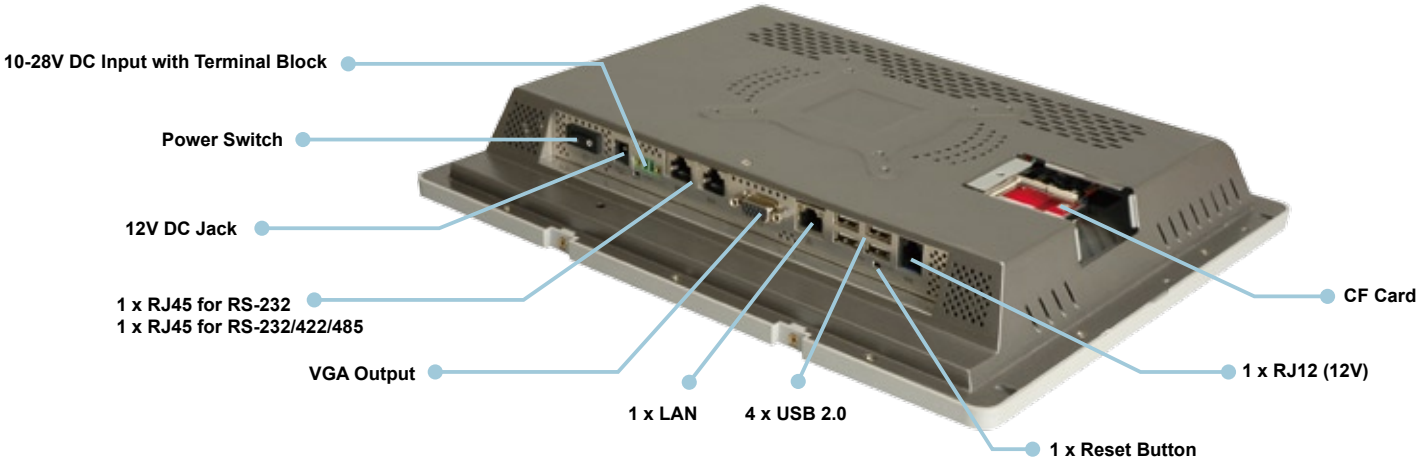
AFL-4xxx In-wall PPC Product Line Naming Rule



Ordering Information

Model		Description
8"	AFL-408BB-N270/WT-R/1GB-R12	8.0" 250 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-408BW-N270/WT-R/1GB-R12	8.0" 250 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-408BG-N270/WT-R/1GB-R12	8.0" 250 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
8.4"	AFL-408AB-N270/WT-R/1GB-R11	8.4" 400 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-408AW-N270/WT-R/1GB-R11	8.4" 400 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-408AG-N270/WT-R/1GB-R11	8.4" 400 cd/m², 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
10.2"	AFL-W410AB-N270/WT-R/1GB-R11	10.2" 400 cd/m², 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-W410AW-N270/WT-R/1GB-R11	10.2" 400 cd/m², 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-W410AG-N270/WT-R/1GB-R11	10.2" 400 cd/m², 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
12.1"	AFL-412AB-N270/WT-R/1GB-R11	12.1" 400 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-412AW-N270/WT-R/1GB-R11	12.1" 400 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-412AG-N270/WT-R/1GB-R11	12.1" 400 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS
15"	AFL-415AB-N270/WT-R/1GB-R11	15" 350 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-415AW-N270/WT-R/1GB-R11	15" 350 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-415AG-N270/WT-R/1GB-R11	15" 350 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS
15"	AFL-415AEB-N270/WT-R/1GB-R11	15" 250 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-415AEW-N270/WT-R/1GB-R11	15" 250 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-415AEG-N270/WT-R/1GB-R11	15" 250 cd/m², 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS

Note: Optional 1.3MP Camera with Digital Microphone Module



ISMM Support Functions

	Voltage	Fan	Smart Fan	Temprature	DIO	WDT	Beep	Cash Drawer
AFL-408A-N270	V			V	V	V	V	V
AFL-W410A-N270	V			V	V	V	V	V
AFL-412A-N270	V			V	V	V	V	V
AFL-415A-N270	V			V	V	V	V	V

Options

Model		AFL-408A-N270	AFL-408B-N270	AFL-W410A-N270	AFL-412A-N270	AFL-415A-N270	AFL-415AE-N270
Wall mounting kit		AFLWK-12				AFLWK-19	
ARM		ARM-11-RS / ARM-31-RS					
Stand		STAND-A08 / STAND-100-RS / STAND-C12-R10		STAND-A12 / STAND-100-RS / STAND-C12-R10		STAND-A19 / STAND-B19 STAND-210-RS / STAND-C19-R10	
VSTAND		VSTAND-A10			VSTAND-A12	N/A	N/A
9~30VDC to 12VDC converter module		IDD-930160-KIT				N/A	N/A
	OS: Win CE 6.0 (128 MB CF card)	AFLCF-408A-N270-CE060-R10	AFLCF-408B-N270-CE060-R10	AFLCF-W410-N270-CE060	AFLCF-412-N270-CE060	AFLCF-415A-N270-CE060-R10	
	OS: Win XPE (1 GB CF card)	AFLCF-408A-N270-XPE-R10	AFLCF-408B-N270-XPE-R10	AFLCF-W410-N270-XPE	AFLCF-412-N270-XPE	AFLCF-415A-N270-XPE-R10	
	OS: Linux (2 GB CF card)	AFLCF-408A-N270-LNX-R10	AFLCF-408B-N270-LNX-R10	AFLCF-W410-N270-LNX-R10	AFLCF-412-N270-LNX-R10	AFLCF-415A-N270-LNX-R10	
DC 12V Input UPS		AUPS-A10-R10				AUPS-B10-R10	
DC 9~36V Input UPS		AUPS-A20-R10				AUPS-B20-R10	
Faceplate (Black Color)		AFLFP-408A-B-R10	AFLFP-408B-B-R10	AFLFP-W410A-B-R10	AFLFP-412A-B-R10	AFLFP-415A-B-R10	
Faceplate (White Color)		AFLFP-408A-W-R10	AFLFP-408B-W-R10	AFLFP-W410A-W-R10	AFLFP-412A-W-R10	AFLFP-415A-W-R10	
Faceplate (Gray Color)		AFLFP-408A-G-R10	AFLFP-408B-G-R10	AFLFP-W410A-G-R10	AFLFP-412A-G-R10	AFLFP-415A-G-R10	
In-Wall Cage (Options)		AFLIWC-408A-R10		AFLIWC-W410A-R10	AFLIWC-412A-R10	AFLIWC-415A-R10	

Note: Win CE application without digital microphone function

Removable Faceplate: AFLFP-4xxx-G-R10 AFLFP-4xxx-W-R10 AFLFP-4xxx-B-R10

Gray Color White Color Black Color

Packing List

Item	P/N	Q'ty	Specifications
Screws	44233-030081-RS	4	M3; φ8mm
Power Adapter	63000-FSP0481AD101C-RS	1	90 ~ 264V 12v; 48W
Power Cable	32000-000002-RS	1	1750mm, European Standard
User's Manual CD ROM	7B000-000087-RS	1	
Touch Pen	XTR104-0002-RS	1	
Remote Control Unit	72000-8T00320ICP05G-RS	1	

AFOLUX RFID PPC Series

EM / MIFARE Compliance !

ACT-08A

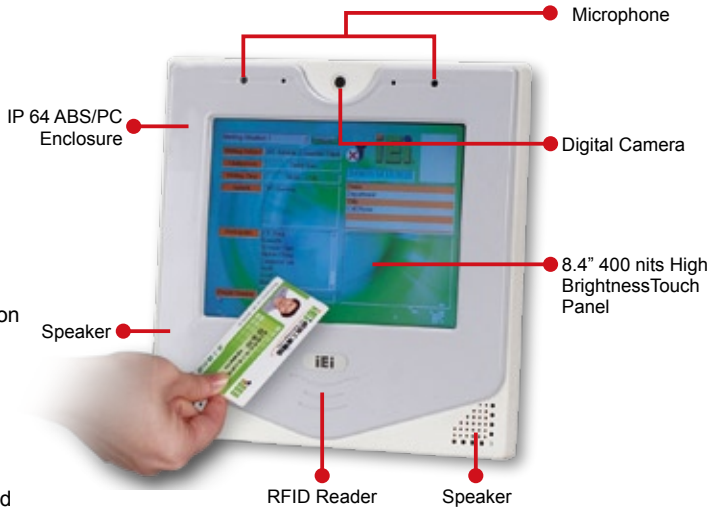
8.4" SVGA Intelligent Access Control Terminal

- Fanless
- All-in-One Intelligent System
- Rugged Design

All-in-One Access Control Terminal

The advanced, easy-to-use ACT-08A fanless touch-screen panel PC all-in-one control terminal reads both MIFARE and EM tags and transponders. The fanless ACT-08A panel PCs are built on low-power, low-heat x86 Intel® 910GMLE, VIA CX700M chipsets or Intel® 945GSE chipsets. The x86 ACT-08A panel PC are more flexible than the traditional RISC-based control terminals. The x86 architecture enables system developers to integrate sophisticated time attendance, access control and/or prepaid card software on the ACT-08A for implementation in the following areas:

- Door Access
- Time Attendance
- Cashless payment for vehicle, ticket, membership club, photocopying, dining, laundry…etc.
- Parking Access control



• All-in-One Ready to Run

The x86 ACT-08A all-in-one panel PC with Windows CE and Windows XPE operating systems is easily integrated with data intensive applications including voice recognition, face recognition etc. The ACT-08A with an 8.4" touch panel is a complete turnkey solution that comes with an RFID reader digital camera, microphone, two speakers, built-in Wi-Fi and Bluetooth module.

• Fanless

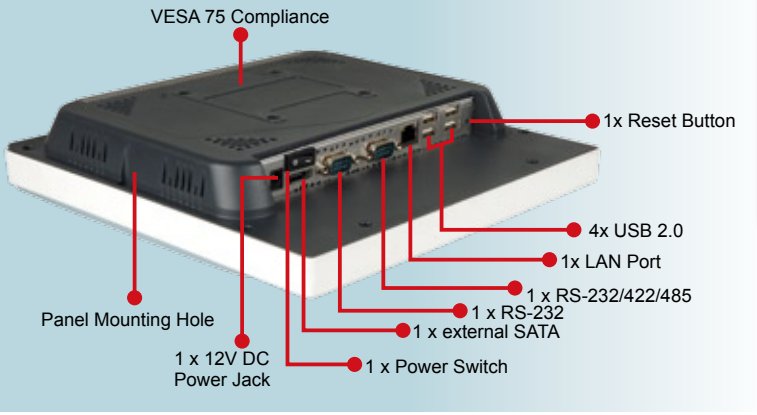
The fanless ACT-08A systems have less downtime and extended operational lives as they are not susceptible to overheating problems caused by fan failures.

• Rugged Design

The rugged ACT-08A systems combine IP 64 compliant front panels with anti-shock and anti-vibration shields to ensure the system is secured against vandalism and protected against extreme environmental conditions.

Features

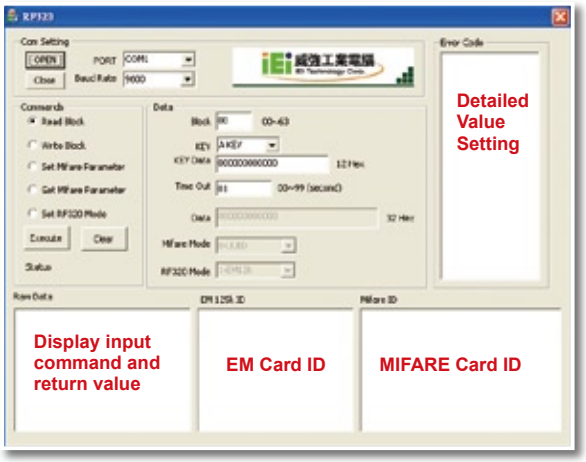
- 8.4" TFT-LCD with Resistive Touch Screen
  8.4" SVGA (800x 600) 400 nits high brightness LCD monitor with robust 4-wire resistive touch screen emables the most convenient access and control
- Fanless 1.0 GHz Intel® Celeron® M processor with 512 KB L2 cache/ 1.0 GHz ULV VIA Eden/ Intel® Atom™ N270 1.6GHz processor
- Integrated RFID Reader in front of the Panel
  For MIFARE 13.56 MHz or EM 125 KHz RFID tag
- 300K pixel Camera up to VGA resolution (640 x 480) (Optional 1.3MP Camera with Digital Microphone Module)
- Built-in microphone
- Wireless Connection 802.11 b/g wireless LAN Module (internal PCIe mini card interface)
- One CF Type II Slot
- Mounting Panel, Wall, Stand and Arm mounting Compliance (VESA 75 mm x 75 mm)



Programmable RFID Support

IEI provides the specific information about how to configure RFID software utilities:

- Read from the MIFARE Card
- Write into the MIFARE Card
- Set Parameter of the MIFARE Card Reader
- Read Parameter of the MIFARE Card Reader
- Set detect type of Card Reader

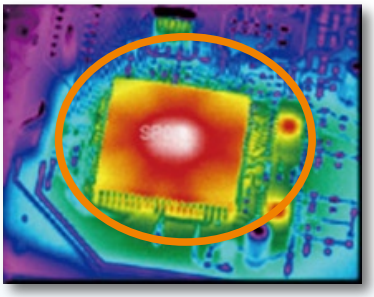


Complete Solutions for You

A. ACT-08A-9103

► 8.4" SVGA High Performance Access Control Terminal

Embedded High Computing Performance
The slim Intel® 910GMLE powered ACT-08A-9103 is a high-performance, low-power information access control terminal. The ACT-08A-9103 is ideal for processing-intensive applications that require superior computing performance.



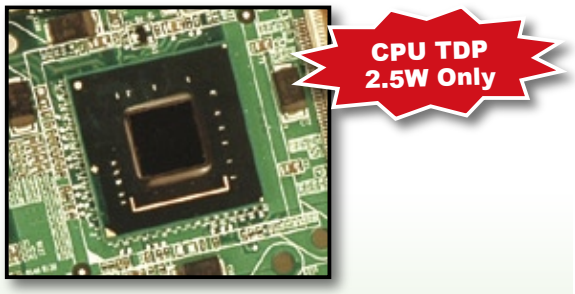
With low power consumption benefit, BGA type enhances thermal performance and system stabilities significantly.

Processor	Intel® Celeron® M 1.0 GHz/ 512k Cache
Chipset	Intel® 910GMLE
Memory	one 200-pin 2GB (maximum) DDR2 SO-DIMM

B. ACT-08A-N270

► Extremely Low Power Consumption

The 45 nm Intel® Atom™ processor N270 has a 1.60 GHz clock speed and a 533 MHz FSB with a 512 KB L2 cache. The Intel® Atom™ is interfaced through the 533 MHz FSB to an Intel® 945GSE graphics memory controller hub (GMCH) which is in turn interfaced through a high-speed direct media interface (DMI) to an Intel® Mobil ICH7-M I/O controller hub (ICH).



Processor	Intel® Atom™ N270 1.6G
Chipset	Intel® 945GSE / ICH7M
Memory	Supports one 2GB (maximum) 400MHz or 533MHz DDR2 SO-DIMM

Expand Your Opportunities with RFID

The latest RFID identification reader enables the ACT-08A to be integrated into applications with sophisticated automated identification requirements.

• Diagram of ACT-08A with RFID

The RFID chip communicates with the reader through RFID induction technology . These tags require close proximity to an antenna to complete a transaction. They are often used when transactions must be processed quickly or hands-free.

ACT-08A RFID Reader

Transponder (RF tag)

Compatible with EM and MIFARE!

RFID tags come in a wide variety of shapes and sizes: Plastic/paper Card, Key Fobs, ABS/ PVC Tag, clear tag..etc, assist to expand more applications.

Built-in RFID Module

The RFID tag reader is fully protected in a very low-profile enclosure in the front of the ACT-08A to identify objects using radio-frequency communication techniques and easily for sensor the common smart cards: MIFARE/EM card.

RFID Card Categories

	MIFARE Card	EM Card
Effective Sensing Distance	5cm (max)	10cm (max)
Frequency Band	13.56 MHz	125 KHz
Applications	MIFARE Card with 1.0 kByte of memory ideal for more secure applications such as parking, vending and employer cards or as a stored value card.	Ideal for storage id information etc. Student identification, electronic passport, vending, parking and tolls are common applications for contact-less cards.

• Advantages

- **Non-contact**
- **Non-line-of-sight nature of the technology**

• RFID systems are distinguished by frequency ranges

RFID Category	Frequency band	Benefits	Drawbacks
LF	< 135 MHz	Works well around water and metal	• Short read range • Slower read rate
HF	13.56 MHz	Low cost	Higher read rate than LF
UHF	860 MHz to 930 MHz	EPC standard built around this frequency	Does not work with items of high water or metal content

* Operating range depends on reader power and operating environment

Multi-Device Application Possibilities

• Identification

The ACT-08A integrates the RFID reader in the front panel making the ACT-08A ideal for digital identification applications.

Library RFID Management Systems

Membership Management

Student Attendance Monitoring

• Commercial Transactions

The ACT-08A all-in-one access control terminal is easily integrated into automated payment systems integrated at self-service gas stations, in vending machines or at cashier terminals in stores. The ACT-08A also facilitates pre-paying household utilities, paying parking meters etc.

Digital signage and payment systems

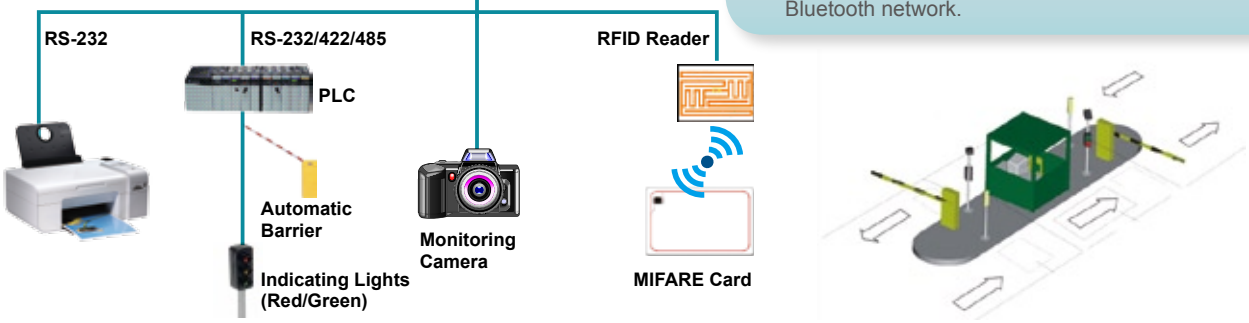
Transportation Payment System

Vending Machines

Parking Lot Entrance Control

• RFID Automated Parking Control System

The RFID controller unit enables the ACT-08A to be implemented in automatic toll collection systems to ensure parking fees are paid. The ACT-08A can be used to access and control a database and monitor the toll collection transaction history.



◉ We Offer

- **Serial port for Data Transmission**
  Two independent RS-232 and RS-233/422/485 serial ports provide connections to data acquisition equipment and many other serial devices.

	RS-232	RS-422	RS-485
Mode of Operation	Single ended	Differential	Differential
Maximum Cable	50 Feet	4000 Feet	4000 Feet
Maximum Data Rate	20 kb/s	10 Mb/s-100 Kb/s	10 Mb/s-100 Kb/s

- **Bluetooth Wireless Connectivity**
  Bluetooth module integrated into the ACT-08A all-in-one panel access control terminal transmits information between peripheral devices through a complete Bluetooth network.

Access Control Door System

The two-in-one EM/MIFARE compliant RFID reader installed in the ACT-08A x86 based panel PC supports sophisticated security applications. Advanced third-party voice and face recognition software can be integrated with the embedded camera and microphone to enable the development of complete security systems to protect restricted environments in banks, government buildings and other sensitive areas.

- **Face Recognition**
  The digital camera captures the image of a person' s face and compares facial contours and other facial features with those stored in a database in a few seconds.

- **Voice Recognition**
  The microphone captures the voice of a person and compares the signature frequencies with those stored in a database.

- **High quality hands-free speakerphone**
  Talk with visitors while they wait outside.

We Offer

- **x86 architecture that is easy for system integrator application development**
- **Bluetooth Connectivity**
  Bluetooth infrastructure eliminates the use of wires or line-of sight.

Healthcare Solutions

The ACT-08A with Radio Frequency Identification (RFID) technology applied in hospitals and healthcare facilities can identify and track patients, objects, and assets, and can speed up or eliminates many manual operations in checking and processing patients.

- **Medication Tracking System**
  Monitoring the entire flow of medication use, from shipment to administration, helps prevent medical mistakes.
- **Asset Tracking**
  Attaching an RFID tag to each piece of equipment and strategically locating ACT-08A readers throughout the area of operations where the hardware is used.

- **AUPS-A10/A20 Optional Uninterruptible Power Systems**

- **Family Access Control to Babies in Neonatal Care**
  After authorization, families have the ability to view details about their babies on the ACT-08A outside the baby care room.

Patient Tracking

Wristband (with space to insert small paper card tag)

We Offer

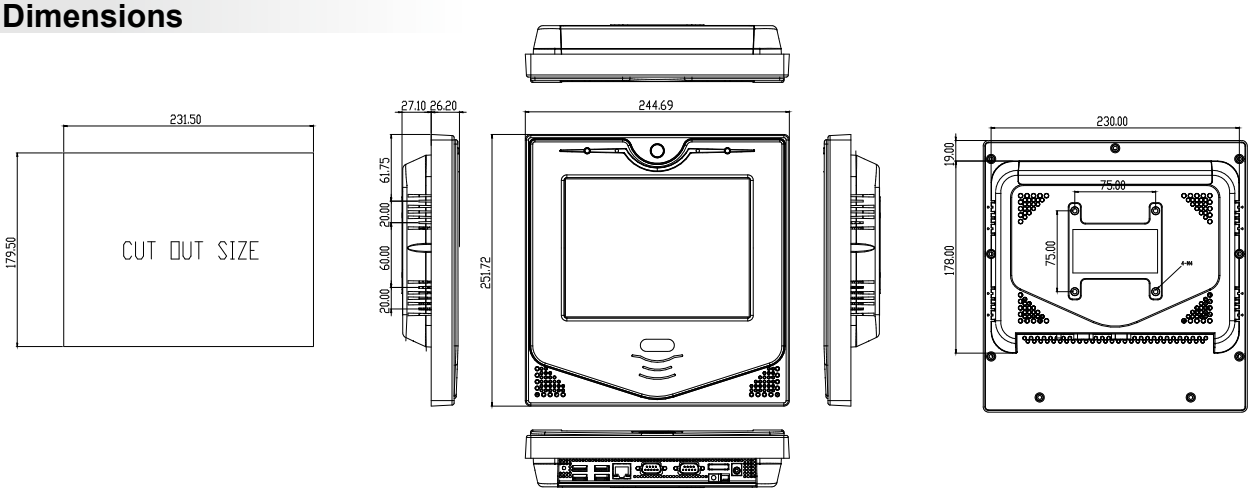
- **Compact Fanless System**
- **Optional Uninterruptible Power System**
  Protecting your ACT-08A from damage in medical environments is critically important. Uninterruptible power supplies reduces the risk of losing valuable data when power failures occur.

Ordering Information

Part No.	Description
ACT-08A-N270/WT-R/1GB-R10	8.4" 400cd/m² SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g wireless module, MIFARE & EM RFID module, touch screen, RoHS
ACT-08A-9103-10G/WT-R/1GB	8.4" 400cd/m² SVGA fanless panel PC with Celeron M 1GHz 512KB cache CPU, 1GB DDR2 RAM, 802.11 b/g wireless module, MIFARE & EM RFID module, touch screen, RoHS

Note: Optional 1.3MP Camera with Digital Microphone Module

Dimensions



Specifications

Model	ACT-08A-9103	ACT-08A-N270
LCD Size	8.4"	
Max Resolution	800 x 600	
Brightness (cd/m²)	400	
Contrast Ratio	500 : 1	
LCD Color	262K	
Pixel Pitch (mm)	0.213(H) x 0.213(V)	
Viewing Angle (H-V)	120°/100°	
Backlight MTBF	50000hrs	
SBC Model	AFLMB-9103-R10	AFLMB-N270-R10
CPU	Intel® Celeron® M processor (1.0GHz) with 512KBL2 Cache	Intel® Atom™ N270 (1.6GHz)
Chipset	Intel® 910GMLE	Intel® 945GSE + ICH7M
RAM	One DDRII SO-DIMM Up to 2GB	One DDRII SO-DIMM Up to 2GB
I/O Ports	1 x RS232 COM Port 1 x RS232 or 422/485 COM Port 1 x Giga LAN 4 x USB 2.0 1 x external SATA 1 x Power Switch 1 x Reset Button 1 x Power Jack	1 x RS232 COM Port 1 x RS232 or 422/485 COM Port 2 x Giga LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack
SSD	CF Type II	
Audio	AMP 1.5W + AMP 1.5W (Internal speaker)	
Extension	1 x Wireless Lan Module (802.11 b/g) (internal PCIe mini card interface)	1 x Wireless Lan Module (802.11 b/g) (internal PCIe mini card interface)
HDD Drive Bay	N/A	
CD-ROM Drive Bay	N/A	
Camera	300K pixel Camera + Digital Microphone (USB interface)	
RFID	MIFARE (13.56MHz) & EM (125KHz) RFID Reader	
Construction Front Panel	ABS + PC Plastic front frame	
Contruction Chassis	Aluminum Chassis	
Power Adapter	60W Power Adapter	48W Power Adapter
LED Function	1 x LED on Front Panel for Power ON/OFF	
Mounting	Panel, Wall, Stand and Arm mounting (VESA 75 x 75mm)	
Color	Blue and White	
Dimension (WxHxD) (mm)	251.72 mm x 244.69 mm x 53.3 mm	
Operation Temperature (ºC)	0ºC ~ 45ºC	-10ºC ~ 50ºC
N/G Weight	1.1 kg	
IP Level	IP64	
Safety & EMI	CE / FCC / CB / CCC	
Power Consumption	48W	35W

Options

		ACT-08A-9103	ACT-08A-N270
Panel Mounting Kit		AFLPK-08	
Wall Mounting Kit		AFLWK-12	
ARM		ARM-11-RS / ARM-31-RS	
STAND		STAND-B08 / STAND-100-RS / STAND-C19-R10	
OS	Win XPE	ACTCF-08-9103-XPE	ACTCF-08-N270-XPE-R10
OS	Win CE6.0	ACTCF-08-9103-CE060	ACTCF-08-N270-CE060-R10

Note: Win CE application without digital microphone function

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Wide 19"

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